



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

Cast-Crete USA, Inc.
P.O. Box 24567
Tampa, Florida 33623

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: "Cast-Crete" 8 inch High Strength Precast and Prestressed Concrete Lintels

APPROVAL DOCUMENT: Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated June 12, 2014, signed and sealed by Craig Parrino, P.E., on August 19, 2014, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each lintel shall bear a permanent label with the manufacturer's name or logo and the Miami-Dade County logo.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 12-0209.13 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, & E-4 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
10/09/2014

NOA No. 14-0903.02
Expiration Date: 05/21/2016
Approval Date: 10/09/2014

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #96-0613.01

A. DRAWINGS

1. *Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", prepared by Craig Parrino, P.E., dated 06/07/96, revision #1 dated 11/08/96, sheet 1 of 1, and Drawing No. LT8, titled "Cast-Crete 8" Lintel Safe Load Tables", prepared by Craig Parrino, P.E., dated 06/07/97, revision #4 dated 04/28/98, sheet 1 of 1, both drawings signed and sealed by Craig Parrino, P.E.*

B. TESTS

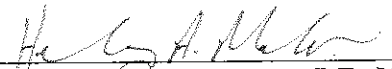
1. *Test report on flexural testing on Precast and Prestressed Concrete Lintels Filled Models, total of (36) concrete lintel specimens, per ASTM E-529-94, prepared by Applied Research Laboratories, Report No. 29702B, dated 07/30/97, signed and sealed by Christopher A. Hamon, P.E.*

C. CALCULATIONS

1. *Calculations for Cast-Crete 8-inch Lintels, dated 06/06/96, 349 pages, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.*
2. *Calculations for Cast-Crete 8-inch Lintels, dated 11/11/96, 45 pages, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report Silo #4 dated April 1996 for cement by Southdown Brooksville Cement Laboratory.*
2. *Mill Certified Inspection Report #20-8275 dated 06/20/95 for prestressing strand by The Crispin Company.*
3. *Mill Certified Inspection Report #20-8345 dated 11/13/95 for prestressing strand by The Crispin Company.*
4. *Mill Certified Inspection Report #2111-078240 dated 04/25/96 for #3 rebar by Ameristeel.*
5. *Mill Certified Inspection Report #84-M19614 dated 02/29/96 for #5 rebar by Birmingham Steel Corp.*
6. *Mill Certified Inspection Report #58-A66332 dated 01/28/96 for #4 rebar by Birmingham Steel Corp.*
7. *Mill Certified Inspection Report #84-M20749 dated 04/05/96 for #5 rebar by Birmingham Steel Corp.*
8. *Mill Certified Inspection Report #84-M19805 dated 03/06/96 for #4 rebar by Birmingham Steel Corp.*
9. *Mill Certified Inspection Report #84-M21208 dated 04/21/96 for #4 rebar by Birmingham Steel Corp.*
10. *Mill Certified Inspection Report #84-M20652 dated 04/03/96 for #5 rebar by Birmingham Steel Corp.*

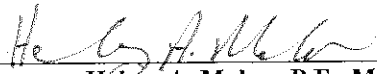


Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 14-0903.02
Expiration Date: 05/21/2016,
Approval Date: 10/09/2014

Cast-Crete USA, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

11. *Mill Certified Inspection Report #84-M20749 dated 04/05/96 for #5 rebar by Birmingham Steel Corp.*
 12. *Quality Control Manual for Cast-Crete Machine Made Precast Lintels dated 05/14/96.*
 13. *Quality Control Manual for Prestressed Products dated 03/20/95.*
-
2. **EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #01-0209.03**
 - A. **DRAWINGS**
 1. *None.*
 - B. **TESTS**
 1. *None.*
 - C. **CALCULATIONS**
 1. *None.*
 - D. **MATERIAL CERTIFICATIONS**
 1. *None.*
-
3. **EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 03-0605.05**
 - A. **DRAWINGS:**
 1. *Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheet 1 of 1, prepared by Craig Parrino, P.E., dated June 7, 1996, revision #2 dated January 28, 2003, and Drawing No. LT8, titled "Cast-Crete 8" Lintel Safe Load Tables", sheets 1 & 2 of 2, prepared by Craig Parrino, P.E., dated June 7, 1996, revision #5 dated March 24, 2003, all drawings are signed and sealed by Craig Parrino, P.E.*
 - B. **TESTS:**
 1. *Test report on flexural testing on Precast Concrete Lintels Filled Models, total of (12) concrete lintel specimens, per ASTM E-529-94, prepared by Applied Research Laboratories, Report No. 30404B, dated 04/23/03, signed and sealed by Christopher A. Hamon, P.E.*
 - C. **CALCULATIONS:**
 1. *Calculations for Cast-Crete High Strength Precast and Prestressed 8-inch Lintels, dated May 29, 2003, sheets 1.1 through 1.493 and 2.1 through 2.336, prepared by Craig Parrino, P.E., signed and sealed by Craig Parrino, P.E.*
 - D. **MATERIAL CERTIFICATION:**
 1. *Quality System Manual for Cast-Crete Machine Made Precast Lintels revised on May 01, 2002.*
 2. *Cast-Crete Quality System Manual for Prestressed Products dated 2002.*


Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 14-0903.02
Expiration Date: 05/21/2016
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0222.01

A. DRAWINGS

1. *Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated February 17, 2006, signed and sealed by Craig Parrino, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade Building Code Compliance Office.*

E. MATERIAL CERTIFICATION

1. *None.*

F. OTHER

1. *Letter from Cast-Crete Corporation, dated 02/20/2006, signed by Craig Parrino, P.E.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 11-0121.04

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

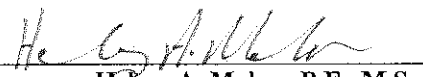
1. *By Miami-Dade Building and Neighborhood Compliance Department (BNC).*

E. MATERIAL CERTIFICATION

1. *None.*

F. OTHER

1. *Letter from Cast-Crete Corporation, dated January 18, 2011, signed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2007 Edition.*


Henry A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 14-0903.02
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Cast-Crete USA, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #12-0209.13

A. DRAWINGS

1. *Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated February 17, 2006, signed and sealed by Craig Parrino, P.E., March 22, 2012.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs.*

E. MATERIAL CERTIFICATION

1. *None.*

F. OTHER

1. *Letter from Cast-Crete Corporation, dated 02/03/2012, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2010 Edition.*

7. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. FD8, titled "Cast-Crete 8" Lintel Fabrication Details", sheets 1 through 3 of 3, prepared by Craig Parrino, P.E., dated June 7, 1996, last revision dated June 12, 2014, signed and sealed by Craig Parrino, P.E., on August 19, 2014.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Calculations for High Strength Precast and Prestressed 8-inch Lintels, dated August 19, 2014, sheets 14.101 through 14.124, prepared, signed and sealed by Craig Parrino, P.E.*

D. QUALITY ASSURANCE

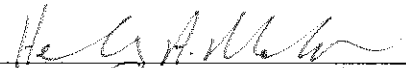
1. *By Miami-Dade County Department of Regulatory and Economic Resources (RER).*

E. MATERIAL CERTIFICATION

1. *None.*

F. OTHER

1. *Letter from Cast-Crete USA, Inc., dated August 19, 2014, signed and sealed by Craig Parrino, P.E., certifying compliance with the Florida Building Code, 2014 Edition.*



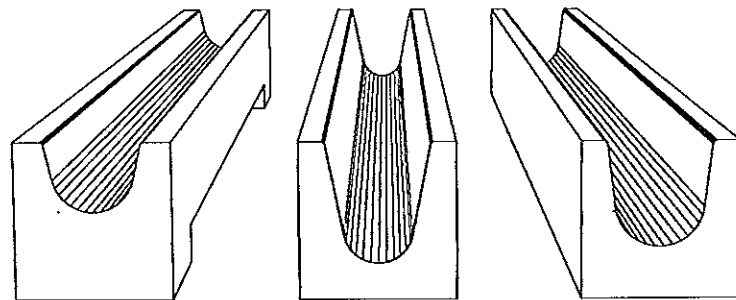
Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor

NOA No. 14-0903.02

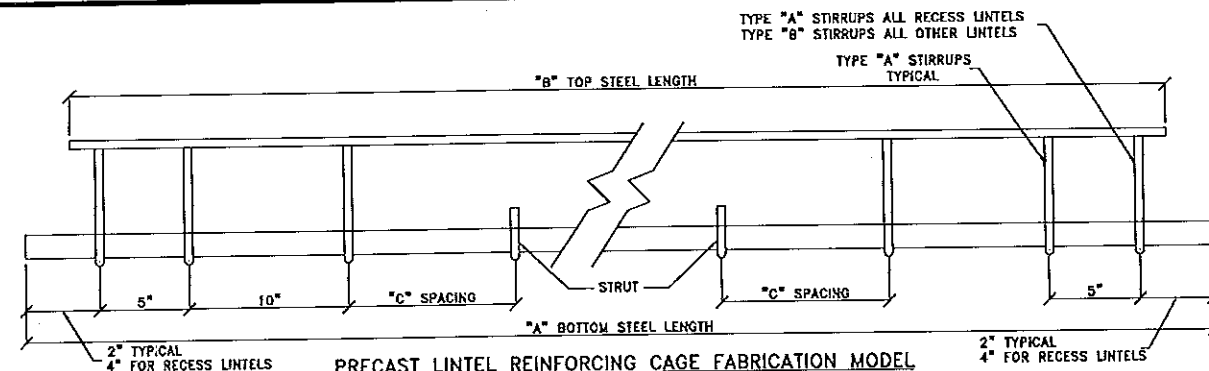
Expiration Date: 05/21/2016

Approval Date: 10/09/2014

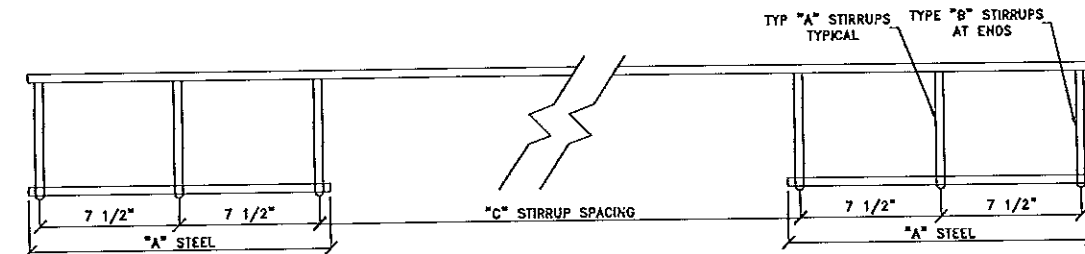
CAST-CRETE® HIGH STRENGTH PRECAST AND PRESTRESSED CONCRETE LINTELS



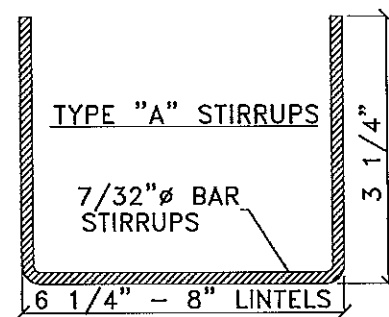
8" PRECAST W/ 2" RECESS DOOR U-LINTEL 8" PRECAST U-LINTEL 8" PRESTRESSED U-LINTEL



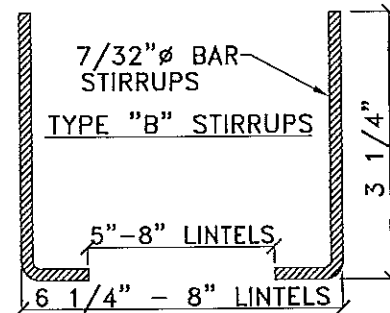
PRECAST LINTEL REINFORCING CAGE FABRICATION MODEL



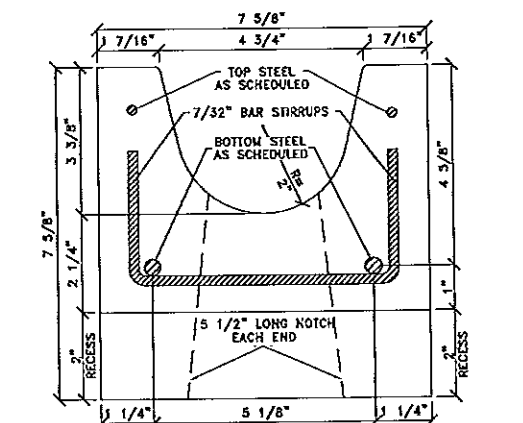
PRESTRESSED LINTEL REINFORCING CAGE FABRICATION MODEL



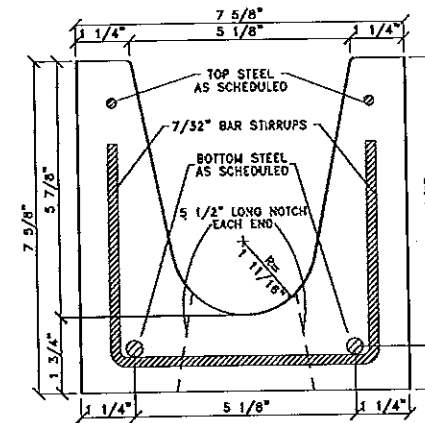
STIRRUP DETAILS
SCALE: N.T.S.



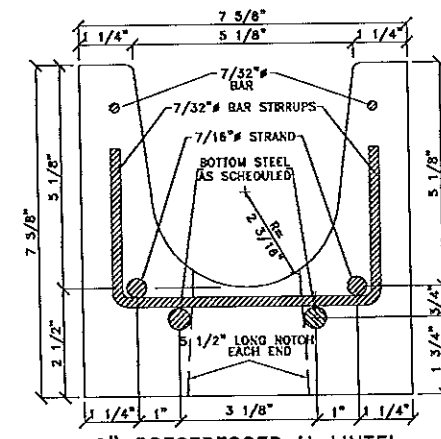
STIRRUP DETAILS
SCALE: N.T.S.



8" PRECAST W/ 2" RECESS DOOR U-LINTEL
SCALE: N.T.S.



8" PRECAST U-LINTEL
SCALE: N.T.S.



8" PRESTRESSED U-LINTEL
SCALE: N.T.S.

8" PRESTRESSED U-LINTEL DATA TABLE

| LINTEL SIZE | VOLUME CY | WEIGHT LBS | "A" STEEL TYPE | "A" STEEL LENGTH | "B" TOP STEEL TYPE | "B" TOP STEEL LENGTH | "C" SPACING | NO. OF STIRRUPS |
|-------------|-----------|------------|----------------|------------------|--------------------|----------------------|----------------|-----------------|
| 14'-8" | 0.134 | 542 | 7/32 BAR | 1'-3" | 7/32 BAR | 14'-6" | 4 @ 3'-0" | 9 |
| 15'-4" | 0.140 | 567 | 7/32 BAR | 1'-3" | 7/32 BAR | 15'-2" | 4 @ 3'-2" | 9 |
| 17'-4" | 0.158 | 639 | 7/32 BAR | 1'-3" | 7/32 BAR | 17'-2" | 4 @ 3'-8" | 9 |
| 19'-4" | 0.176 | 713 | 7/32 BAR | 1'-3" | 7/32 BAR | 19'-2" | 4 @ 4'-2" | 9 |
| 21'-4" | 0.194 | 787 | 7/32 BAR | 1'-3" | 7/32 BAR | 21'-2" | 5 @ 3'-8 3/4" | 10 |
| 22'-0" | 0.200 | 811 | 7/32 BAR | 1'-3" | 7/32 BAR | 21'-10" | 5 @ 3'-10 3/8" | 10 |
| 24'-0" | 0.219 | 885 | 7/32 BAR | 1'-3" | 7/32 BAR | 23'-10" | 5 @ 4'-3 1/8" | 10 |

8" PRECAST W/ 2" RECESS DOOR U-LINTEL DATA TABLE

| LINTEL SIZE | OVERALL LENGTH | RECESS LENGTH | VOLUME CY | WEIGHT LBS | "A" BOTTOM STEEL TYPE | "A" BOTTOM STEEL LENGTH | "B" TOP STEEL TYPE | "B" TOP STEEL LENGTH | "C" SPACING | NO. OF STIRRUPS |
|-------------|----------------|---------------|-----------|------------|-----------------------|-------------------------|--------------------|----------------------|-------------|-----------------|
| 2'-8" | 4'-4" | 3'-0" | 0.036 | 146 | #3 REBAR | 3'-10" PLUS HOOK | 7/32 BAR | 3'-8" | N/A | 4 |
| 3'-0" | 4'-6" | 3'-4" | 0.037 | 150 | #3 REBAR | 4'-0" PLUS HOOK | 7/32 BAR | 3'-10" | N/A | 4 |
| 4'-0" | 5'-8" | 4'-4" | 0.047 | 190 | #3 REBAR | 5'-0" PLUS HOOK | 7/32 BAR | 5'-0" | N/A | 6 |
| 4'-4" | 5'-10" | 4'-8" | 0.047 | 190 | #3 REBAR | 5'-2" PLUS HOOK | 7/32 BAR | 5'-2" | N/A | 6 |
| 5'-0" | 6'-8" | 5'-4" | 0.054 | 219 | #4 REBAR | 6'-0" PLUS HOOK | #3 REBAR | 6'-0" | N/A | 6 |
| 6'-0" | 7'-6" | 6'-4" | 0.060 | 243 | #4 REBAR | 7'-0" PLUS HOOK | #3 REBAR | 6'-10" | N/A | 6 |
| 8'-0" | 9'-8" | 8'-4" | 0.078 | 316 | #4 REBAR | 9'-0" PLUS HOOK | #3 REBAR | 9'-0" | 2'-0" | 8 |

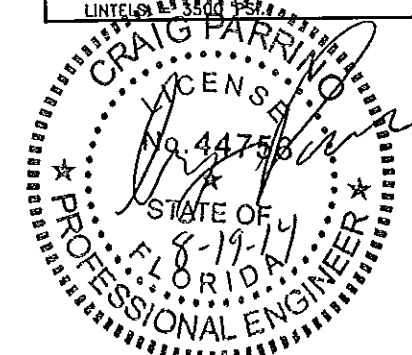
8" PRECAST U-LINTEL DATA TABLE

| LINTEL SIZE | VOLUME CY | WEIGHT LBS | "A" BOTTOM STEEL TYPE | "A" BOTTOM STEEL LENGTH | "B" TOP STEEL TYPE | "B" TOP STEEL LENGTH | "C" SPACING | NO. OF STIRRUPS |
|-------------|-----------|------------|-----------------------|-------------------------|--------------------|----------------------|-------------|-----------------|
| 3'-6" | 0.032 | 126 | #3 REBAR | 3'-5" | 7/32 BAR | 3'-2" | N/A | 4 |
| 4'-0" | 0.037 | 144 | #3 REBAR | 3'-11" | 7/32 BAR | 3'-8" | N/A | 4 |
| 4'-6" | 0.041 | 162 | #3 REBAR | 4'-5" | 7/32 BAR | 4'-2" | N/A | 4 |
| 5'-4" | 0.049 | 192 | #3 REBAR | 5'-3" | 7/32 BAR | 5'-0" | N/A | 6 |
| 5'-10" | 0.054 | 210 | #3 REBAR | 5'-9" | 7/32 BAR | 5'-6" | N/A | 6 |
| 6'-6" | 0.060 | 234 | #4 REBAR | 6'-5" | 7/32 BAR | 6'-2" | N/A | 6 |
| 7'-6" | 0.069 | 270 | #4 REBAR | 7'-5" | 7/32 BAR | 7'-2" | N/A | 6 |
| 9'-4" | 0.086 | 336 | #4 REBAR | 9'-3" | #3 REBAR | 9'-0" | 2'-0" | 8 |
| 10'-6" | 0.096 | 378 | #4 REBAR | 10'-5" | #3 REBAR | 10'-2" | 2'-0" | 8 |
| 11'-4" | 0.104 | 408 | #5 REBAR | 11'-3" | #3 REBAR | 11'-0" | 3'-0" | 8 |
| 12'-0" | 0.110 | 432 | #5 REBAR | 11'-11" | #3 REBAR | 11'-8" | 3'-0" | 8 |
| 13'-4" | 0.122 | 480 | #5 REBAR | 13'-3" | #3 REBAR | 13'-0" | 3'-0" | 8 |
| 14'-0" | 0.129 | 504 | #5 REBAR | 13'-11" | #3 REBAR | 13'-8" | 3'-0" | 8 |

THIS PROPRIETARY INFORMATION IS PROVIDED FOR PRODUCT APPROVAL. IT IS PROTECTED BY COPYRIGHT LAWS AND CANNOT BE REPRODUCED OR DISTRIBUTED WITHOUT THE PRIOR WRITTEN CONSENT OF CAST-CRETE USA, INC.

GENERAL NOTES:

1. REINFORCING STEEL: 7/32 BAR ASTM A510; #3, #4, AND #5 REBAR GRADE 60 ASTM A615; 7/16 INCH DIAMETER 270KSI LOW-RELAXATION PRESTRESSING STRAND ASTM A416.
2. CONCRETE STRENGTHS: $f'_c = 6000$ PSI FOR 8" PRESTRESSED LINTELS; $f'_c = 4000$ PSI FOR ALL PRECAST 8 INCH LINTELS.
3. INITIAL PRESTRESS FORCE = $0.70 \times f_{pu}$.
4. STRIPPING STRENGTH: PRESTRESSED LINTELS 550 PSI.
5. NOTE: THE TOTAL NUMBER OF STIRRUPS REQUIRED IS COUNTED STARTING FROM EACH END OF THE REINFORCING CAGE; FOR EXAMPLE - NO. OF STIRRUPS = 4, THEN THE REINFORCING CAGE MODEL SHOWS 2 STIRRUPS FROM EACH END.
6. 2.5 POUNDS OF POLYPROPYLENE FIBERS PER CU.YD. OF CONCRETE MAY BE USED IN LIEU OF PRESTRESSED LINTEL REINFORCING CAGE TO RESIST LIFTING AND HANDLING FORCES.

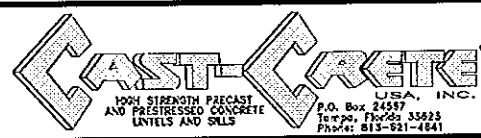


PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 14-0903.02
Expiration Date 05/21/2016
By: *[Signature]*
Miami Data Product Control

CRAIG PARRINO
6324 CR 579
SEFFNER, FL 33584
FL P.E. LIC. NO. 44756

| NO. | BY | REVISION | DATE |
|-----|----|--------------------------------------|----------|
| 1 | CP | GENERAL REVISION NUMBER ONE | 11/08/96 |
| 2 | TO | GENERAL REVISION NUMBER TWO | 1/28/03 |
| 3 | CP | NAME CHANGE & SYNTHETIC FIBER OPTION | 2/17/06 |
| 4 | CP | GENERAL REVISION | 6/12/14 |

MEMBER OF
CCM
NATIONAL
CONCRETE MASONRY
ASSOCIATION



TITLE: CAST-CRETE 8" LINTEL FABRICATION DETAILS

| | | |
|----------------------|--|------------------------------|
| FILE NAME: DBSUB1-14 | DRAWN BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | SCALE: NOT TO SCALE |
| DATE: 06/07/96 | CHECKED BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | DRAWING No. FDB SHEET 1 OF 3 |

SAFE GRAVITY LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

| LENGTH | TYPE | SAFE LOAD - POUNDS PER LINEAR FOOT | | | | | | | | |
|---------------|-------------|------------------------------------|-----|--------|---------|---------|-----------|-----------|------------|------------|
| | | | 8U8 | 8F8-0B | 8F12-0B | 8F16-0B | 8F20-0B | 8F24-0B | 8F28-0B | 8F32-0B |
| LENGTH | TYPE | SAFE LOAD - POUNDS PER LINEAR FOOT | 8U8 | 8F8-1B | 8F12-1B | 8F16-1B | 8F20-1B | 8F24-1B | 8F28-1B | 8F32-1B |
| | | | | 8F8-1B | 8F12-1B | 8F16-1B | 8F20-1B | 8F24-1B | 8F28-1B | 8F32-1B |
| 3'-6" (42") | PRECAST | 2231 | | 3069 | 3719 | 5163 | 6607 | 8054 | 9502 | 10951 |
| 4'-0" (48") | PRECAST | 1966 | | 3069 | 4605 | 6113 | 7547 | 8974 | 10394 | 11809 |
| 4'-6" (54") | PRECAST | 1599 | | 2561 | 2751 | 3820 | 4890 | 5961 | 7034 | 8107 |
| 5'-4" (64") | PRECAST | 1217 | | 2693 | 4605 | 6113 | 7547 | 8974 | 10394 | 11809 |
| 5'-10" (70") | PRECAST | 1062 | | 1969 | 2110 | 2931 | 3753 | 4576 | 5400 | 6224 |
| 6'-6" (78") | PRECAST | 908 | | 2189 | 4375 | 6113 | 7547 (7) | 8672 | 10294 | 11809 |
| 7'-6" (90") | PRECAST | 743 | | 1349 | 1438 | 1999 | 2560 | 3123 | 3686 | 4249 |
| 9'-4" (112") | PRECAST | 554 | | 1663 | 3090 | 5365 | 7547 (36) | 7342 (19) | 8733 (19) | 10127 (19) |
| 10'-6" (126") | PRECAST | 475 | | 1105 | 1173 | 1631 | 2090 | 2549 | 3009 | 3470 |
| 11'-4" (136") | PRECAST | 362 | | 1451 | 2622 | 4360 | 7168 (15) | 6036 (19) | 7181 (19) | 8328 (20) |
| 12'-0" (144") | PRECAST | 337 | | 1238 | 2177 | 3480 | 5301 | 3707 | 4383 | 5061 |
| 13'-4" (160") | PRECAST | 296 | | 1238 | 2177 | 3480 | 5381 | 8360 | 10394 (37) | 8825 (14) |
| 14'-0" (168") | PRECAST | 279 | | 1011 | 1729 | 2632 | 2205 | 2698 | 3191 | 3685 |
| 14'-8" (176") | PRESTRESSED | N.R. | | 1011 | 1729 | 2661 | 3898 | 5681 | 8467 (44) | 6472 (15) |
| 15'-4" (184") | PRESTRESSED | N.R. | | 699 | 1160 | 1625 | 2564 | 3486 | 2818 | 3302 |
| 17'-4" (208") | PRESTRESSED | N.R. | | 752 | 1245 | 1843 | 2564 | 3486 | 4705 (37) | 6390 (47) |
| 19'-4" (232") | PRESTRESSED | N.R. | | 535 | 890 | 1247 | 2093 | 2777 | 2163 | 2536 |
| 21'-4" (256") | PRESTRESSED | N.R. | | 643 | 1052 | 1533 | 2093 | 2781 | 3643 (33) | 4754 (43) |
| 22'-0" (264") | PRESTRESSED | N.R. | | 582 | 945 | 1366 | 1846 | 2423 | 3127 | 4006 |
| 24'-0" (288") | PRESTRESSED | N.R. | | 582 | 945 | 1366 | 1846 | 2423 | 3127 | 4006 |
| | | | | 540 | 873 | 1254 | 1684 | 2193 | 2805 | 3552 |
| | | | | 540 | 873 | 1254 | 1684 | 2193 | 2805 | 3552 |
| | | | | 471 | 755 | 1075 | 1428 | 1838 | 2316 | 2883 |
| | | | | 471 | 755 | 1075 | 1428 | 1838 | 2316 | 2883 |
| | | | | 424 | 706 | 1002 | 1326 | 1697 | 2127 | 2630 |
| | | | | 442 | 706 | 1002 | 1326 | 1697 | 2127 | 2630 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 458 | 783 | 1370 | 1902 | 2245 | 2517 | 2712 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 412 | 710 | 1250 | 1733 | 2058 | 2320 | 2513 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 300 | 548 | 950 | 1326 | 1609 | 1849 | 2047 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 235 | 420 | 750 | 1037 | 1282 | 1515 | 1716 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 180 | 340 | 598 | 845 | 1114 | 1359 | 1468 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 165 | 315 | 550 | 784 | 1047 | 1285 | 1399 |
| | | | | NR | NR | NR | NR | NR | NR | NR |
| | | | | 129 | 250 | 450 | 654 | 884 | 1092 | 1222 |

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4 ON SHEET 3 OF 3.

SAFE LATERAL LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

| LENGTH | TYPE | SAFE LOAD PLF | | | |
|---------------|-------------|---------------|------|------|--------|
| | | | 8U8 | 8F8 | RCMU * |
| 3'-6" (42") | PRECAST | 1025 | 1025 | 1024 | 1598 |
| 4'-0" (48") | PRECAST | 765 | 765 | 763 | 1309 |
| 4'-6" (54") | PRECAST | 592 | 592 | 591 | 1073 |
| 5'-4" (64") | PRECAST | 411 | 411 | 411 | 745 |
| 5'-10" (70") | PRECAST | 340 | 340 | 339 | 616 |
| 6'-6" (78") | PRECAST | 507 | 507 | 721 | 490 |
| 7'-6" (90") | PRECAST | 424 | 424 | 534 | 363 |
| 9'-4" (112") | PRECAST | 326 | 326 | 512 | 230 |
| 10'-6" (126") | PRECAST | 284 | 284 | 401 | 180 |
| 11'-4" (136") | PRECAST | 260 | 260 | 452 | 154 |
| 12'-0" (144") | PRECAST | 244 | 244 | 402 | 137 |
| 13'-4" (160") | PRECAST | 217 | 217 | 324 | 110 |
| 14'-0" (168") | PRECAST | 205 | 205 | 293 | 100 |
| 14'-8" (176") | PRESTRESSED | N.R. | 284 | 91 | |
| 15'-4" (184") | PRESTRESSED | N.R. | 259 | 83 | |
| 17'-4" (208") | PRESTRESSED | N.R. | 194 | 64 | |
| 19'-4" (232") | PRESTRESSED | N.R. | 148 | 52 | |
| 21'-4" (256") | PRESTRESSED | N.R. | 125 | 42 | |
| 22'-0" (264") | PRESTRESSED | N.R. | 116 | 40 | |
| 24'-0" (288") | PRESTRESSED | N.R. | 91 | 33 | |

* SEE GENERAL NOTE NO. 18 ON SHEET 3 OF 3.

SAFE UPLIFT LOADS FOR 8" PRECAST & PRESTRESSED U-LINTELS

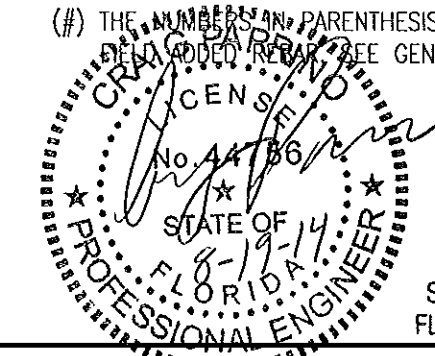
| LENGTH | TYPE | SAFE LOAD - POUNDS PER LINEAR FOOT | | | | | | | | |
|---------------|-------------|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|--|
| | | | 8F8-1T | 8F12-1T | 8F16-1T | 8F20-1T | 8F24-1T | 8F28-1T | 8F32-1T | |
| LENGTH | TYPE | SAFE LOAD - POUNDS PER LINEAR FOOT | 8F8-2T | 8F12-2T | 8F16-2T | 8F20-2T | 8F24-2T | 8F28-2T | 8F32-2T | |
| | | | 8F8-2T | 8F12-2T | 8F16-2T | 8F20-2T | 8F24-2T | 8F28-2T | 8F32-2T | |
| 3'-6" (42") | PRECAST | 1569 | 2655 | 3524 | 4394 | 5263 | 6132 | 7001 | | |
| 4'-0" (48") | PRECAST | 1569 | 2655 | 3524 | 4394 | 5263 | 6132 | 7001 | | |
| 4'-6" (54") | PRECAST | 1363 | 2305 | 3080 | 3815 | 4570 | 5325 | 6079 | | |
| 5'-4" (64") | PRECAST | 1363 | 2305 | 3080 | 3815 | 4570 | 5325 | 6079 | | |
| 5'-10" (70") | PRECAST | 1207 | 2040 | 2707 | 3375 | 4043 | 4711 | 5379 | | |
| 6'-6" (78") | PRECAST | 1207 | 2040 | 2707 | 3375 | 4043 | 4711 | 5379 | | |
| 7'-6" (90") | PRECAST | 1016 | 1715 (11) | 2276 (4) | 2838 | 3399 | 3961 | 4522 | | |
| 9'-4" (112") | PRECAST | 1016 | 1715 | 2276 | 2838 | 3399 | 3961 | 4522 | | |
| 10'-6" (126") | PRECAST | 909 | 1567 (18) | 2080 (13) | 2593 (9) | 3107 (6) | 3620 (4) | 4133 (3) | | |
| 11'-4" (136") | PRECAST | 929 | 1567 | 2080 | 2593 | 3107 | 3620 | 4133 | | |
| 12'-0" (144") | PRECAST | 835 (12) | 1407 (28) | 1868 (21) | 2329 (18) | 2790 (15) | 3251 (14) | 3712 (12) | | |
| 13'-4" (160") | PRECAST | 835 | 1407 | 1868 | 2329 | 2790 | 3251 | 3712 | | |
| 14'-0" (168") | PRECAST | 727 (23) | 1065 (28) | 1624 (31) | 2025 (28) | 2426 (25) | 2827 (25) | 3228 (24) | | |
| 14'-8" (176") | PRESTRESSED | 727 | 1224 | 1624 | 2025 | 2426 | 2827 | 3228 | | |
| 15'-4" (184") | PRESTRESSED | 591 | 708 (25) | 1136 (34) | 1474 (34) | 1815 (34) | 2157 (34) | 2500 (34) | | |
| 17'-4" (208") | PRESTRESSED | 591 | 862 | 1318 | 1643 | 1969 | 2294 | 2619 | | |
| 19'-4" (232") | PRESTRESSED | 530 | 575 (24) | 916 (33) | 1188 (33) | 1461 (33) | 1736 (33) | 2011 (33) | | |
| 21'-4" (256") | PRESTRESSED | 530 | 695 | 1180 (6) | 1472 (4) | 1763 (2) | 2055 | 2346 | | |
| 22'-0" (264") | PRESTRESSED | 474 | 504 (23) | 800 (32) | 1037 (32) | 1274 (32) | 1513 (32) | 1753 (32) | | |
| 24'-0" (288") | PRESTRESSED | 494 | 607 | 1042 (16) | 1372 (11) | 1643 (5) | 1915 (4) | 2187 (3) | | |
| | | 470 (8) | 458 (23) | 724 (31) | 938 (32) | 1153 (32) | 1369 (32) | 1585 (32) | | |
| | | 470 | 550 | 940 (16) | 1302 (15) | 1560 (13) | 1818 (11) | 2075 (10) | | |
| | | 418 (15) | 386 (22) | 607 (30) | 785 (30) | 964 (30) | 1143 (31) | 1323 (31) | | |
| | | 428 | 460 | 780 (8) | 1159 (21) | 1418 (20) | 1653 (19) | 1887 (17) | | |
| | | 384 (15) | 358 (21) | 560 (26) | 724 (30) | 889 (30) | 1054 (30) | 1220 (30) | | |
| | | 410 | 425 | 717 (9) | 1063 (21) | 1358 (23) | 1582 (22) | 1807 (21) | | |
| | | 239 | 334 (21) | 520 (29) | 672 (23) | 825 (29) | 978 (29) | 1131 (29) | | |
| | | 246 | 395 | 663 (9) | 980 (20) | 1303 (28) | 1518 (25) | 1734 (24) | | |
| | | 224 | 313 (20) | 486 (28) | 627 (23) | 769 (29) | 911 (29) | 1054 (29) | | |
| | | 230 | 368 | 616 (9) | 908 (20) | 1240 (28) | 1460 (27) | 1668 (26) | | |
| | | 187 | 263 (19) | 405 (26) | 521 (27) | 638 (27) | 756 (27) | 873 (27) | | |
| | | 192 | 306 | 506 (8) | 740 (19) | 1005 (27) | 1271 (31) | 1473 (31) | | |
| | | 162 | 229 (17) | 348 (25) | 447 (25) | 547 (25) | 647 (25) | 747 (25) | | |
| | | 166 | 263 | 429 (8) | 623 (18) | 841 (23) | 1059 (30) | 1227 (30) | | |
| | | 142 | 204 (16) | 307 (23) | 393 (23) | 480 (23) | 568 (24) | 655 (24) | | |
| | | 142 | 232 | 373 (17) | 537 (17) | 721 (23) | 905 (25) | 1048 (29) | | |
| | | 137 | 197 (15) | 295 (22) | 379 (23) | 462 (23) | 546 (23) | 630 (23) | | |
| | | 137 | 223 | 358 (17) | 513 (17) | 688 (24) | 863 (28) | 999 (28) | | |
| | | 124 | 179 (14) | 267 (21) | 342 (21) | 416 (21) | 492 (21) | 567 (22) | | |
| | | 124 | 202 | 319 (17) | 455 (15) | 606 (23) | 757 (27) | 876 (27) | | |

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4 ON SHEET 3 OF 3.

SEE GENERAL NOTES - SHEET 3 OF 3

| NO. | BY | REVISION | DATE |
|-----|----|-----------------------------|----------|
| 1 | CP | GENERAL REVISION NUMBER ONE | 11/08/96 |
| 2 | CP | RECESS TYPE DESIGNATION | 12/30/96 |
| 3 | CP | 8U8 11'-4" THRU 14'-0" | 11/08/96 |
| 4 | CP | GENERAL REVISION | 4/28/98 |
| 5 | CP | GENERAL REVISION | 3/24/03 |
| 6 | CP | NAME CHANGE | 2/17/06 |
| 7 | CP | GENERAL REVISION | 6/12/14 |

MEMBER OF
NATIONAL
CONCRETE MASONRY
ASSOCIATION



CRAIG PARRINO
6324 CR 579
SEFFNER, FL 33584
FL. P.E. LIC. NO. 44756

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 14-0903.02
Expiration Date 05/22/2016
By: [Signature]
Miami Date Product Control

TITLE: CAST-CRETE 8" LINTEL FABRICATION DETAILS

| | | |
|----------------------|--|------------------------------|
| FILE NAME: DBSUB2-14 | DRAWN BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | SCALE: NOT TO SCALE |
| DATE: 06/07/96 | CHECKED BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | DRAWING No. FDB SHEET 2 OF 3 |

SAFE GRAVITY LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

| CAST-CRETE | | SAFE LOAD - POUNDS PER LINEAR FOOT | | | | | | | |
|----------------------|------|------------------------------------|---------|----------|----------|----------------------|----------------------|----------------------|-----------------------|
| LENGTH | TYPE | 8RU6 | 8RF6-0B | 8RF10-0B | 8RF14-0B | 8RF18-0B | 8RF22-0B | 8RF26-0B | 8RF30-0B |
| | | | 8RF6-1B | 8RF10-1B | 8RF14-1B | 8RF18-1B | 8RF22-1B | 8RF26-1B | 8RF30-1B |
| 4'-4" (52") PRECAST | | 1635 | 1749 | 3355 | 3280 | 4349 | 5421 | 6493 | 7567 |
| | | | 1891 | 3699 | 5206 | 6639 | 8060 | 9479 | 10893 |
| 4'-6" (54") PRECAST | | 1494 | 1596 | 3063 | 2992 | 3968 | 4946 | 5924 | 6904 |
| | | | 1756 | 3699 | 5206 | 6639 | 8060 | 9479 | 10893 |
| 5'-8" (68") PRECAST | | 866 | 920 | 1770 | 1716 | 2277 | 2839 | 3402 | 3966 |
| | | | 1167 | 2481 | 4567 | 6389 | 8060 ⁽³⁴⁾ | 7917 ⁽¹⁹⁾ | 9311 ⁽¹⁹⁾ |
| 5'-10" (70") PRECAST | | 810 | 859 | 1653 | 1600 | 2124 | 2649 | 3174 | 3700 |
| | | | 1113 | 2342 | 4242 | 6639 ⁽¹⁰⁾ | 8060 ⁽³⁶⁾ | 7402 ⁽¹⁹⁾ | 8706 ⁽¹⁹⁾ |
| 6'-8" (80") PRECAST | | 797 | 901 | 1825 | 3120 | 5048 | 7747 | 9448 | 7360 |
| | | | 901 | 1825 | 3120 | 5048 | 7915 | 9479 | 10893 ⁽³²⁾ |
| 7'-6" (90") PRECAST | | 669 | 755 | 1490 | 2459 | 3776 | 5743 | 7239 | 5623 |
| | | | 755 | 1490 | 2459 | 3776 | 5743 | 8998 ⁽¹⁹⁾ | 10893 ⁽⁴⁸⁾ |
| 9'-8" (116") PRECAST | | 411 | 466 | 999 | 1568 | 2253 | 3129 | 4091 | 3146 |
| | | | 526 | 999 | 1568 | 2253 | 3129 | 4150 | 5891 ⁽⁴⁷⁾ |

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4

SAFE LATERAL LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

| CAST-CRETE | | SAFE LOAD PLF | | |
|----------------------|------|---------------|------|--------|
| LENGTH | TYPE | 8RU6 | 8RF6 | RCMU * |
| | | | | |
| 4'-4" (52") PRECAST | | 758 | 757 | 1164 |
| 4'-6" (54") PRECAST | | 694 | 693 | 1073 |
| 5'-8" (68") PRECAST | | 408 | 407 | 655 |
| 5'-10" (70") PRECAST | | 382 | 381 | 616 |
| 6'-8" (80") PRECAST | | 595 | 788 | 464 |
| 7'-6" (90") PRECAST | | 509 | 674 | 363 |
| 9'-8" (116") PRECAST | | 370 | 490 | 214 |

* SEE GENERAL NOTE 18

SAFE UPLIFT LOADS FOR 8" PRECAST w/ 2" RECESS DOOR U-LINTELS

| CAST-CRETE | | SAFE LOAD - POUNDS PER LINEAR FOOT | | | | | | | |
|----------------------|------|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|--|
| LENGTH | TYPE | 8RF6-1T | 8RF10-1T | 8RF14-1T | 8RF18-1T | 8RF22-1T | 8RF26-1T | 8RF30-1T | |
| | | 8RF6-2T | 8RF10-2T | 8RF14-2T | 8RF18-2T | 8RF22-2T | 8RF26-2T | 8RF30-2T | |
| 4'-4" (52") PRECAST | | 905 | 1668 | 2362 | 3056 | 3751 | 4445 | 5140 | |
| | | 905 | 1668 | 2362 | 3056 | 3751 | 4445 | 5140 | |
| 4'-6" (54") PRECAST | | 867 | 1604 | 2272 | 2939 | 3607 | 4275 | 4943 | |
| | | 867 | 1604 | 2272 | 2939 | 3607 | 4275 | 4943 | |
| 5'-8" (68") PRECAST | | 675 | 1269 ⁽¹⁶⁾ | 1797 | 2326 ⁽³⁾ | 2854 ⁽²⁾ | 3382 | 3911 | |
| | | 675 | 1269 | 1797 | 2326 | 2854 | 3382 | 3911 | |
| 5'-10" (70") PRECAST | | 655 | 1207 ⁽¹⁶⁾ | 1746 ⁽¹¹⁾ | 2259 ⁽⁷⁾ | 2773 ⁽⁵⁾ | 3286 ⁽⁹⁾ | 2799 ⁽¹⁾ | |
| | | 655 | 1233 | 1746 | 2259 | 2773 | 3286 | 2799 | |
| 6'-8" (80") PRECAST | | 570 | 929 ⁽¹⁶⁾ | 1530 ⁽²²⁾ | 1980 ⁽¹⁹⁾ | 2429 ⁽¹⁵⁾ | 2879 ⁽¹⁵⁾ | 3329 ⁽¹⁹⁾ | |
| | | 570 | 1080 | 1530 | 1980 | 2429 | 2879 | 3329 | |
| 7'-6" (90") PRECAST | | 506 | 742 ⁽¹⁶⁾ | 1364 ⁽³⁰⁾ | 1765 ⁽²⁷⁾ | 2166 ⁽²⁵⁾ | 2567 ⁽²⁴⁾ | 2968 ⁽²³⁾ | |
| | | 506 | 898 | 1364 | 1765 | 2166 | 2567 | 2968 | |
| 9'-8" (116") PRECAST | | 395 | 468 ⁽¹⁵⁾ | 884 ⁽³²⁾ | 1222 ⁽³³⁾ | 1540 ⁽³⁴⁾ | 1859 ⁽³⁴⁾ | 2180 ⁽³⁴⁾ | |
| | | 395 | 560 | 1072 | 1386 | 1701 | 2016 | 2331 | |

(#) THE NUMBERS IN PARENTHESIS ARE PERCENT REDUCTIONS FOR GRADE 40 FIELD ADDED REBAR. SEE GENERAL NOTE NO. 4

GENERAL NOTES

1) Materials:

- f'c 8" precast lintel = 4000 psi
- f'c prestressed lintel = 6000 psi
- f'c grout = 3000 psi with maximum 3/8 inch aggregate
- concrete masonry units (CMU) per ASTM C90 with minimum net area compressive strength = 1900 psi
- rebar per ASTM A615 Grade 60
- prestressing strand per ASTM A416 Grade 270 low relaxation
- mortar per ASTM C270 Type M or S

2) All safe load tables based on minimum 4 inch nominal bearing.

Exception: Safe loads for lintel type 8U8 and 8RU6 must be reduced by 20% if bearing length is less than 6 1/2 inches.

3) Provide full mortar bed and head joints.

4) The number in parenthesis indicates the percent reduction for grade 40 field added rebar.

Example: 7'-6" Lintel 8F32-1B safe gravity load = 6472 (15) w/ 15% reduction $\Rightarrow 6472 (.85) = 5501$ plf

5) All lintels meet or exceed L/360 deflection.

Exception: Prestress lintel type 8F8 17'-4" and longer meets or exceeds L/180 deflection. Use is limited to conditions meeting the Florida Building Code Sections 1604.3.1 as applicable

6) Shore filled lintels as required.

7) One #7 rebar may be substituted for two #5 rebars.

8) Installation/attachment of lintel must comply with the architectural and/or structural documents.

9) The designer may evaluate concentrated loads from the safe load tables by calculating the maximum resisting moment and shear at d-away from the face of support.

10) N.R. = Not Rated

11) Bottom field added rebar to be located at the bottom of the lintel cavity.

12) Lintels are manufactured with 5-1/2" long notches at the ends to accommodate vertical cell reinforcing and grouting.

13) The exterior surface of lintels installed in exterior concrete masonry walls shall have a coating of stucco applied in accordance with ASTM C-926 or other approved coating.

14) Lintels loaded simultaneously with vertical (gravity or uplift) and horizontal (lateral) loads should be checked for the combined loading with the following equation:

$$\frac{\text{Applied vertical load}}{\text{Safe vertical load}} + \frac{\text{Applied horizontal load}}{\text{Safe horizontal load}} \leq 1.0$$

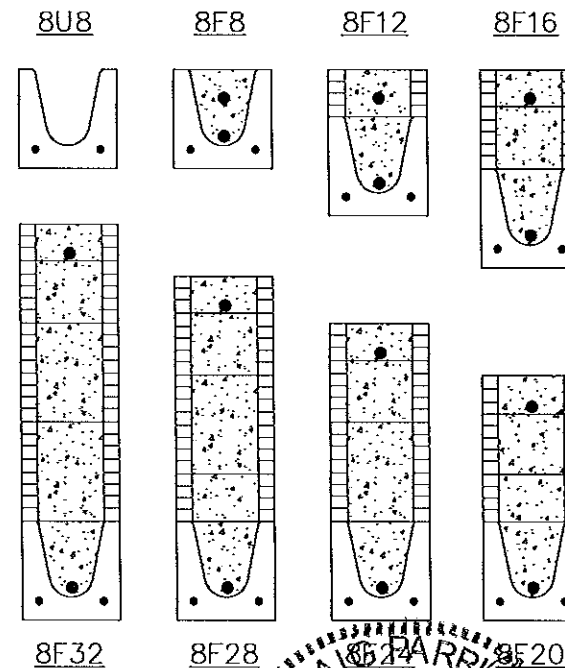
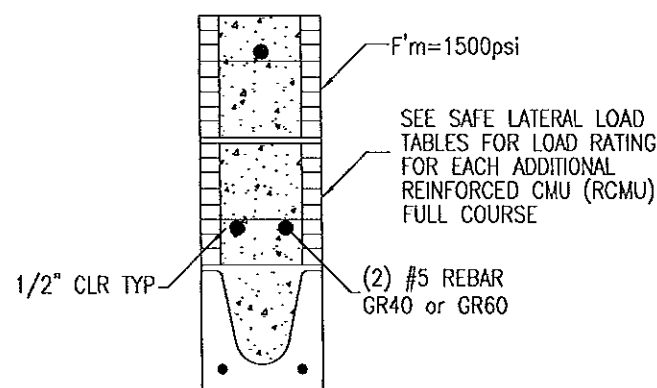
15) For composite lintel heights not shown, use safe load from next lower height shown.

16) For lintel lengths not shown, use safe load from next longest length shown.

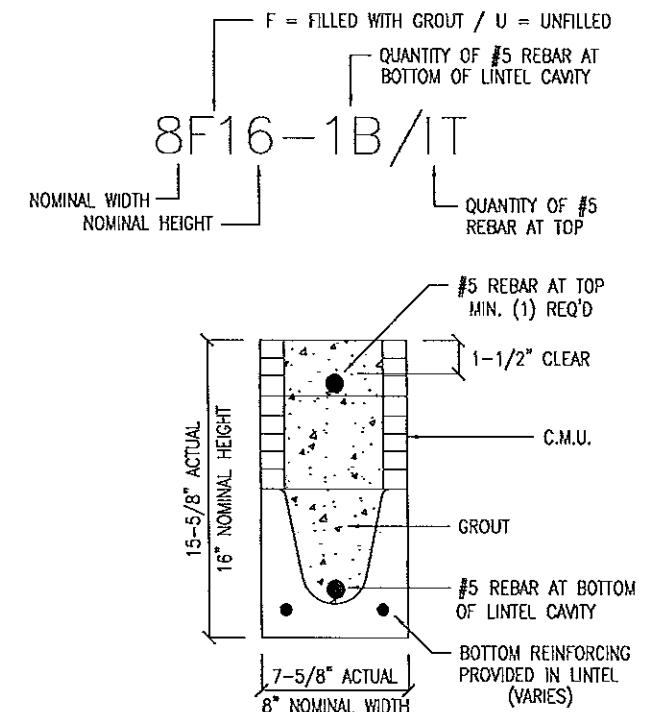
17) Safe loads are superimposed allowable loads.

18) Safe loads based on rational design analysis per ACI 530 and ACI 318

19) Additional lateral load capacity can be obtained by the designer by providing additional reinforced concrete masonry units (RCMU) above the lintel. See sketch below:

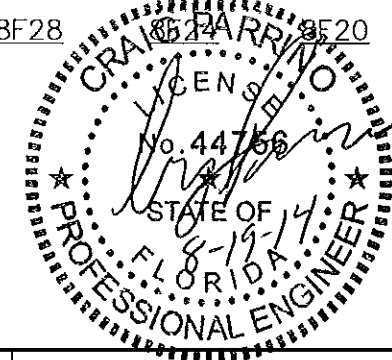


TYPE DESIGNATION



PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 14-4993-02
Expiration Date 05/31/2016
By *[Signature]*
Miami Data Product Control

CRAIG PARRINO
6324 CR 579
SEFFNER, FL 33584
FL. P.E. LIC. NO. 44756



| NO. | BY | REVISION | DATE |
|-----|----|-----------------------------|----------|
| 1 | CP | GENERAL REVISION NUMBER ONE | 11/08/96 |
| 2 | CP | RECESS TYPE DESIGNATION | 12/30/96 |
| 3 | CP | 8U8 11'-4" THRU 14'-0" | 11/08/96 |
| 4 | CP | GENERAL REVISION | 4/28/98 |
| 5 | CP | GENERAL REVISION | 3/24/03 |
| 6 | CP | NAME CHANGE | 2/17/06 |
| 7 | CP | GENERAL REVISION | 6/12/14 |

MEMBER OF
NATIONAL
CONCRETE MASONRY
ASSOCIATION



TITLE: CAST-CRETE 8" LINTEL FABRICATION DETAILS

| | | |
|----------------------|--|------------------------------|
| FILE NAME: OBSUB3-14 | DRAWN BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | SCALE: NOT TO SCALE |
| DATE: 06/07/96 | CHECKED BY: CRAIG PARRINO, P.E. - REG. NO. 44756 | DRAWING No. FD8 SHEET 3 OF 3 |